

Title (en)
SELF-HEALING DENTAL COMPOSITES AND RELATED METHODS

Title (de)
SELBSTTHEILENDE DENTALKOMPOSITE UND RELEVANTE VERFAHREN

Title (fr)
COMPOSITES DENTAIRE D'AUTO-RÉGÉNÉRATION ET PROCÉDÉS AFFÉRENTS

Publication
EP 2152224 A4 20140416 (EN)

Application
EP 07795658 A 20070601

Priority

- US 2007013046 W 20070601
- US 80924807 A 20070531

Abstract (en)
[origin: WO2008147366A1] Dental restorative composites having self-healing capabilities to repair discontinuities in the composite are provided. Dental restorative composites according to the present invention include a microsphere that encapsulates a monomer. When a fracture occurs, the microsphere is ruptured and the monomer fills the fracture. Depending on the monomer present in the microsphere, it is polymerized by a polymerization initiator or by an olefin metathesis catalyst present in the dental restorative composite. Self-healing dental restorative composites provide increased resistance to fracturing, and thus remain substantially intact for a longer period of time, preserving the remedial integrity of the dental repair or reconstruction.

IPC 8 full level
A61K 6/083 (2006.01); **A61K 6/087** (2006.01); **A61K 6/09** (2006.01); **A61K 6/884** (2020.01); **A61K 6/891** (2020.01); **A61K 6/893** (2020.01); **A61K 6/896** (2020.01)

CPC (source: EP US)
A61K 6/887 (2020.01 - EP US); **A61K 6/891** (2020.01 - EP US); **A61K 6/893** (2020.01 - EP US); **A61K 6/896** (2020.01 - EP US)

Citation (search report)

- [YD] US 6518330 B2 20030211 - WHITE SCOTT R [US], et al
- [Y] US 2006063853 A1 20060323 - HURWITZ MAMI M [US], et al
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- See references of WO 2008147366A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2008147366 A1 20081204; AU 2007354338 A1 20081204; AU 2007354338 B2 20120524; CA 2689031 A1 20081204; CA 2689031 C 20141104; EP 2152224 A1 20100217; EP 2152224 A4 20140416; EP 2152224 B1 20220817; JP 2010528111 A 20100819; JP 2013049697 A 20130314; JP 5678319 B2 20150304; MX 2009012999 A 20100126; US 2008300340 A1 20081204; US 8735463 B2 20140527

DOCDB simple family (application)
US 2007013046 W 20070601; AU 2007354338 A 20070601; CA 2689031 A 20070601; EP 07795658 A 20070601; JP 2010510270 A 20070601; JP 2012240146 A 20121031; MX 2009012999 A 20070601; US 80924807 A 20070531